

## METHODS AND APPARATUS FOR MEASURING NETWORK PERFORMANCE

### ABSTRACT OF THE DISCLOSURE

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An initiator agent and target agent exchange measurement and response messages to determine the performance of a network supporting communication between the initiator agent and the target agent. The initiator agent creates and transmits measurement packets in a measurement packet group to the target agent. The measurement packet include one or more performance metrics created by the initiator agent such as timestamp information and sequencing information. The target agent receives the measurement packets, perform calculations of network performance metrics in generates corresponding response packets that are forwarded back to the initiator agent. The initiator agent receives the response packets and uses parameter information contained therein to calculate network link performance metrics such as one-way and round-trip packet latency of measurement and response packets as well as packet loss performance metrics for one-way and round-trip packet propagation between the initiator and target agents. Payload data within the measurement and response packets simulates application data traffic.

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